

# *Precision***Power**<sup>®</sup>

---

Absolutely State of the Art Mobile Audio

**Owner's Manual and  
Installation Guide**

**S550.1D**

**S850.1D**

**S1300.1D**

**S2000.1D**

**SEDONA SERIES**

---

## **CONGRATULATIONS**

Thank you for choosing Precision**Power** audio equipment. Designed and engineered in the USA, this product combines innovative technology with the finest materials to consistently deliver Absolutely State of the Art™ performance, sound quality, reliability, and value. This Precision**Power** product reflects our commitment to offer you unparalleled performance and quality for years of dependable service and listening enjoyment.

## **SERVICE**

Do not attempt to service Precision**Power** products yourself. Performing maintenance on your audio equipment will void the warranty. Many parts of the Precision**Power** product are custom built to our specifications. **Our factory parts are not made available to anyone else nor are they for sale.** Our goal is to make sure that your PrecisionPower product will always sound as good as the day it was purchased. Contact your Authorized Precision **Power** Dealer about obtaining any warranty service through Precision**Power**.

## **CAUTION**

Extended use of a high powered audio system may result in hearing loss or damage. While Precision**Power** systems are capable of “Concert Level” volumes with incredible accuracy, they are also designed for you to enjoy at more reasonable levels all of the sonic subtleties created by musicians. Please observe all local sound ordinances.

## **FEATURES**

- DOUBLE SIDE PCB AND SMD COMPONENTS.
- FULL MOSFET DESIGN.
- LPF AND SUBSONIC CROSSOVER.
- ADJUSTABLE BASSBOOST LEVEL.
- ACTIVE X-OVER FUNCTION.
- HEAVY-DUTY ALUMINUM ALLOY HEATSINK.
- HIGH (Speaker) OR LOW (RCA) LEVEL INPUTS.
- OVERLOAD, OVERHEAT, HIGH/LOW VOLTAGE PROTECTION.
- ROHS COMPLIANT.

## **CONTROL FUNCTIONS**

### **1. SPEAKERS**

Connect speakers/subwoofers to these terminals. Be sure to check wire for proper polarity. Never connect the speaker cables to chassis ground.

### **2. +12 Volt Power**

Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery.

Warning: Always protect this power cable by installing a fuse or circuit breaker of the appropriate size within 18 inches (45cm) of the battery terminal connection.

### **3.Remote Turn On**

This terminal turns on the amplifier when (+)12 volt is applied to it . Connect it to the remote turn on lead of the head unit or signal source.

### **4.GND**

Connect this cable directly to the frame of the vehicle. Make sure the metal frame has been stripped of all paint down to the bare metal. Use the shortest distance possible. It is always a good idea to replace the factory ground at this time with a larger cable equal to the new amplifier power cable or larger. CAUTION: Do not connect this terminal directly to the vehicle battery ground terminal or any other factory ground points.

### **5. RCA input jacks**

These RCA input jacks are for use with source units that have RCA outputs. A source unit with a minimum level of 200mV is required for proper operation. The use of high quality twisted pair cables is recommended to decrease the possibility of radiated noise entering the system.

### **6. High level inputs**

The high level inputs are for use with speaker level wiring. Some source units do not have RCA outputs, so use this terminal for speaker level signal input. CAUTION: Never use high level input when RCA inputs available.

**CONTROL FUNCTIONS**

**7. REMOTE**

Connect the remote controller to control the subwoofer amplifier volume from the driver seat location, for ease of adjustment during playing.

**8. LEVEL Control**

The level control will match the amplifiers sensitivity to the source units signal voltage. The Operating range is 200mV minimum to 5V maximum. This is NOT a volume control!

**9. Low Pass Filter Control**

This control is used to select the desired low pass x-over frequency. The frequency can be adjusted from 40Hz to 220Hz for all bass mono models.

**10. Subsonic Filter Control**

This control can filter out unwanted low frequency from 10Hz (OFF) to 50Hz. This function will increase the power handling of your woofers.

**11. Bass Boost Level switch**

This switch can boost bass level by 0dB, 6dB or 12dB. The boost frequency is centered at 50Hz.

**12. Power Indicator**

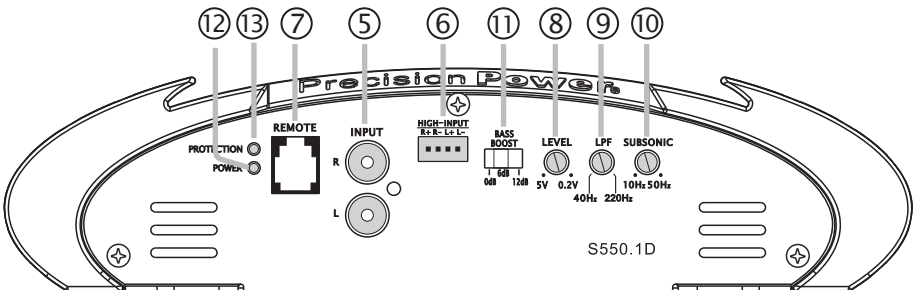
This LED will light up when amplifier works properly.

**13. Protection Indicator**

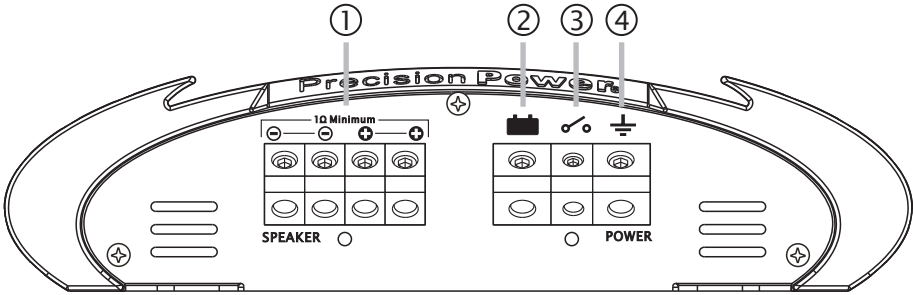
The red LED will light up or be flashing if there is a fault presented to the amplifier. Please disconnect the amplifier and resolve the fault before reconnecting the amplifier.

**PANEL LAYOUT**

**Fig 1. S550.1D/S850.1D/S1300.1D/S2000.1D Panel layout**



## PANEL LAYOUT



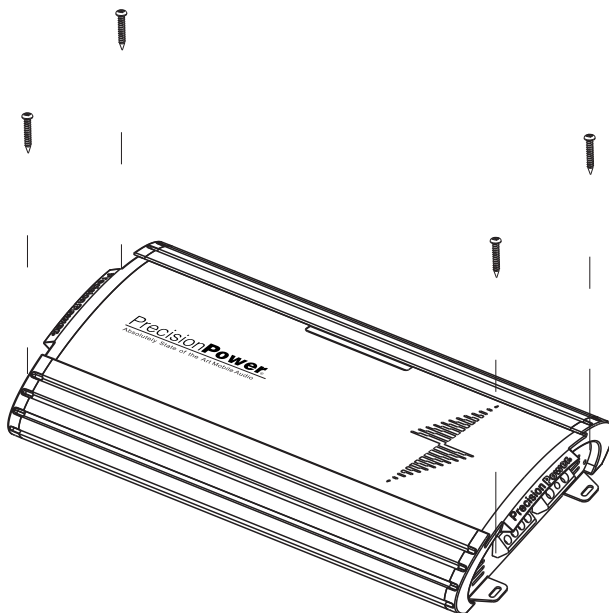
## INSTALLATION PRECAUTIONS

Before you install the amplifier, investigate your car's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring. Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals. If you need to replace the power fuse, replace it only with a fuse identical to that suggested by this manual. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by warranty .

## MOUNTING AMPLIFIER

1. Plan the installation of the amplifiers and find a suitable location with sufficient air circulation.
2. Check the drawing below to mount the bottom amplifier.

Fig 2. Mount bottom amplifier



**CONNECTING THE AMPLIFIER**

1. Select cable and fuse according to the following table.

| MODEL | S2000.1D | S1300.1D | S850.1D | S550.1D |
|-------|----------|----------|---------|---------|
| CABLE | 2-4#     | 4#       | 4-6#    | 4-6#    |
| FUSE  | 200A     | 120A     | 80A     | 60A     |

- 2. Connect the amplifiers ground cable to a close, bare metal part of the frame or chassis. Use a nut and bolt, NOT a screw! The ground cable must be at least the same size as the +12volt cable.
- 3. Connect the remote terminal to remote output of the head unit using 16 gauge (or heavier) wire.
- 4. Connect the fuse holder within 18”(45cm) of the car battery, and run the selected cable from this fuse to the amplifier.
- 5. Connect all the inputs with high-quality cables. Connect Remote Control if necessary.
- 6. Insert fuse(s) into the battery fuse holder(s).
- 7. If using a subwoofer for 2-CH and 4-CH, bridge the channels by using the Left “+” and the Right “-” terminals.

**WIRING DIAGRAM**

**Fig 3.** Mono amplifier wiring  
(1 woofer load)

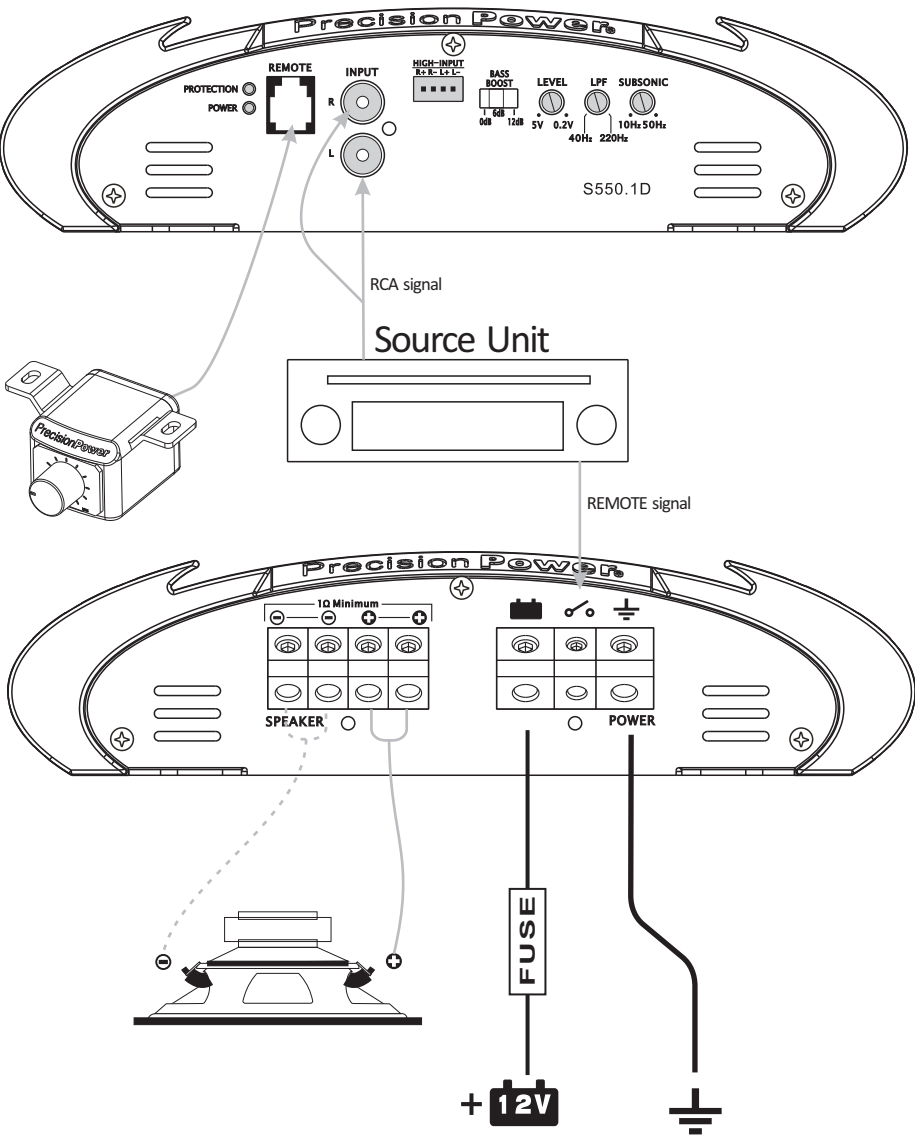
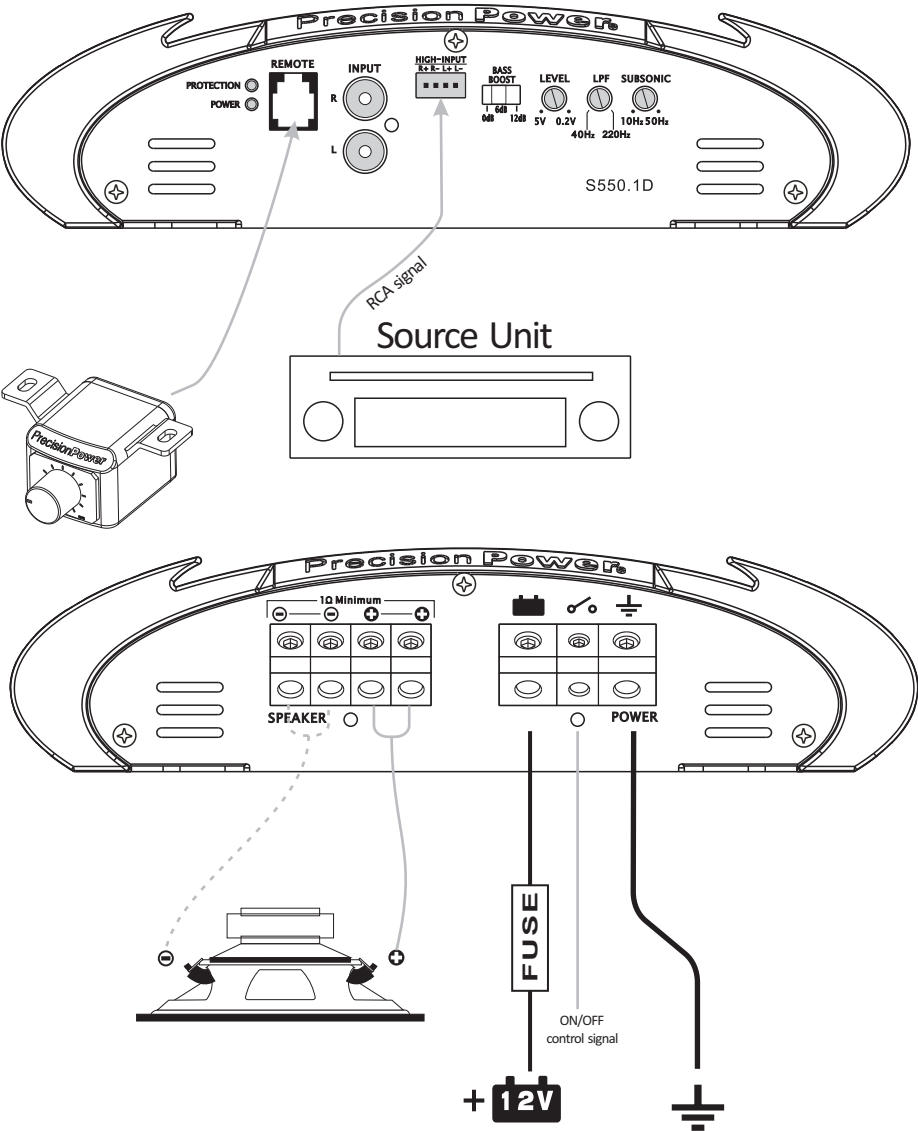
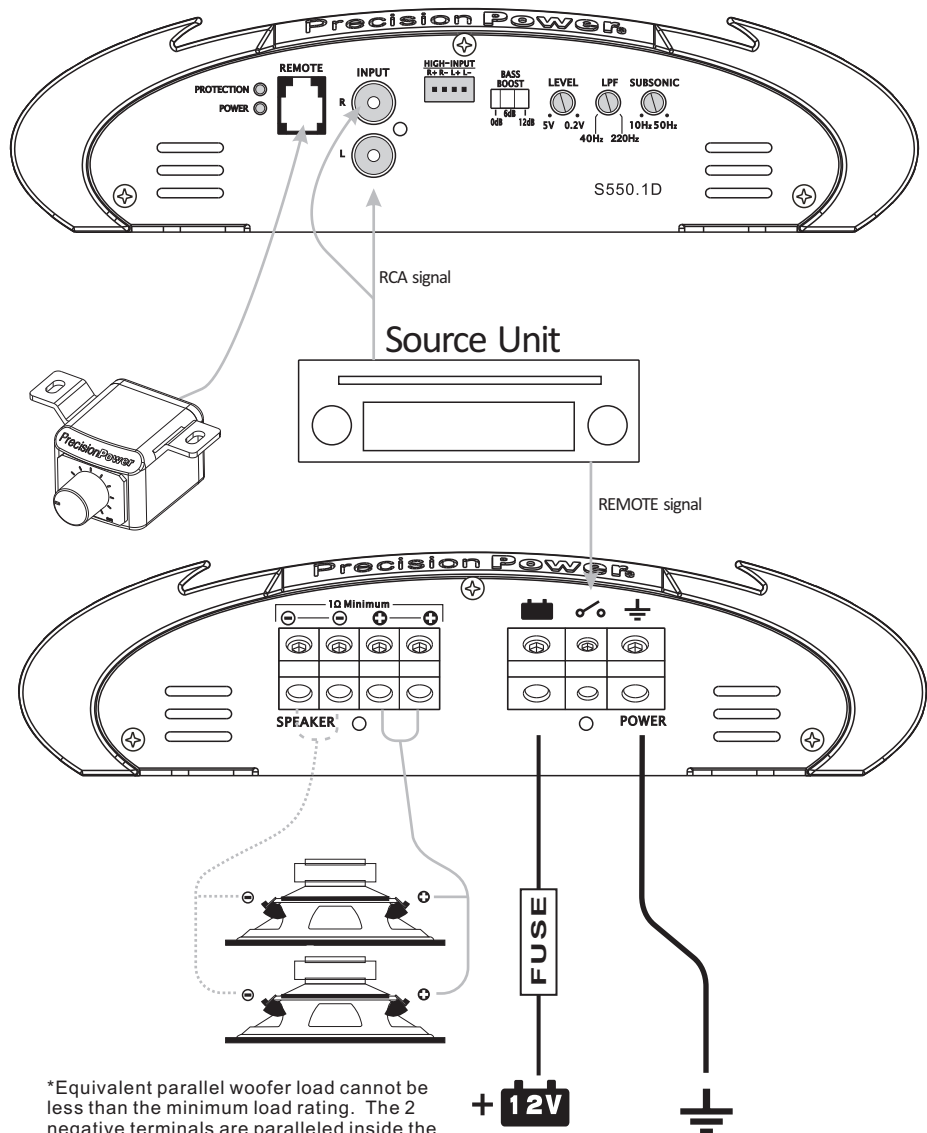


**Fig 4.** Mono amplifier wiring  
(High level input mode)



**WIRING DIAGRAM**

**Fig 5. Mono amplifier wiring**  
(multi woofers)



\*Equivalent parallel woofer load cannot be less than the minimum load rating. The 2 negative terminals are paralleled inside the amplifiers, as are the 2 positive terminals. These are monoblock amplifiers, not multi-channel amplifiers.

## TROUBLE SHOOTING

| Symptom                            | Possible Remedy                                                                                                                                                                                                                                                  |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Amplifier will not power up</b> | <i>Check to make sure you have a good ground connection.<br/>Check that there is battery power on the (+)terminal .<br/>Check all fuses, replace if necessary .<br/>Make sure that the Protection LED is not illuminated.</i>                                    |
| <b>Protection LED Comes on</b>     | <i>Check for short circuits on speaker leads.<br/>Check the speaker load not beyond the minimum load.<br/>Remove speaker lead, and reset the amplifier. If the protection LED still Comes on, then the amplifier is faulty and needs servicing .</i>             |
| <b>No output</b>                   | <i>Check that the RCA audio cables are plugged into the proper inputs.<br/>Check all speakers wiring.<br/>Check the headunit output and the amplifier level setting.</i>                                                                                         |
| <b>Low output</b>                  | <i>Reset the level Control.<br/>Check the Crossover Control settings.</i>                                                                                                                                                                                        |
| <b>High hiss in The speakers</b>   | <i>Check the RCA cable is not shorted to power ground at amplifier side.<br/>Check the amplifier grounding.</i>                                                                                                                                                  |
| <b>Distorted sound</b>             | <i>Check that the Input level control is set to match the signal level of the head unit. Always try to set the Input level as low as possible.<br/>Check that all crossover frequencies are properly set.<br/>Check for short circuits on the speaker leads.</i> |
| <b>Amplifier gets Very hot</b>     | <i>Check that the minimum load impedance for the amplifier model is correct.<br/>Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan.</i>                                    |

SPECIFICATIONS

|                      |                  |               |               |               |
|----------------------|------------------|---------------|---------------|---------------|
| Model                | S550.1D          | S850.1D       | PX1.1300D     | PX1.2000D     |
| RMS power at 14.4V   |                  |               |               |               |
| 1Ohm Load            | 550W x 1         | 850W x 1      | 1300W x 1     | 2000W x 1     |
| 2Ohm Load            | 400W x 1         | 600W x 1      | 900W x 1      | 1300W x 1     |
| 4Ohm Load            | 240W x 1         | 350W x 1      | 520W x 1      | 750W x 1      |
| Bridged 4Ohm Load    | N/A              | N/A           | N/A           | N/A           |
| Features             |                  |               |               |               |
| Input Level          | 0.2~5V           |               |               |               |
| High level input     | Yes              |               |               |               |
| Frequency Response   | 10Hz - 220Hz     |               |               |               |
| X-over Type          | LPF/Subsonic     |               |               |               |
| LPF                  | 40Hz - 220Hz     |               |               |               |
| Subsonic / HPF       | 10Hz - 50Hz      |               |               |               |
| Bass Boost Frequency | 55Hz             |               |               |               |
| Bass Boost Level     | 0dB - 6dB - 12dB |               |               |               |
| THD                  | <0.5%            |               |               |               |
| Damping Factor       | >200             |               |               |               |
| S/N Ratio            | >85dB            |               |               |               |
| Minimum Load         | 1 Ohm            |               |               | 0.5 Ohm       |
| Voltage Protection   | <8.4V & >16V     |               |               |               |
| Components & PCB     |                  |               |               |               |
| Bass Remote          | Yes              |               |               |               |
| DIMENSION            |                  |               |               |               |
| Height               | 59mm/2.32"       |               |               |               |
| Width                | 240mm/ 9.45"     |               |               |               |
| Length               | 305mm/ 12.01"    | 345mm/ 13.58" | 415mm/ 16.34" | 485mm/ 19.09" |